

**REMARKS**

Claims 9-11, 13, 16, 18-19, 22 and 24-26 are pending. Claims 9-11 stand allowed. By this Amendment, claim 20 is cancelled, claims 25 and 26 are added, and claims 13, 19 and 24 are amended.

A. The Office Action rejects claim 20 under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent Publication No. 2002/0071638 of Musk. Claim 20 is no longer pending.

B. The Office Action rejects claims 13, 19 and 24 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2002/0071638 of Musk in view of U.S. Patent Publication No. 2003/0185516 of Kennedy et al. (hereinafter, Kennedy). If applicable to the present claims, this rejection is respectfully traversed.

The Office Action admits that Musk does not disclose that the means for holding comprises a position memory circuit operable to control the positioning device. However, the Office Action asserts that Kennedy teaches the means for holding comprises a position memory circuit operable to control the positioning device, and in particular, the Office Action asserts that “Kennedy teaches that computer 6 determines optical alignment (col. 4, lines 57-65, col. 6 lines 17-29) of the device and stores the coordinates in memory location 7 (at least col. 7 lines 19-41) so that data about the alignment locations may be stored and processed later.” See Office Action, page 2, third paragraph.

(1) Even if, *arguendo*, this assertion were true, Kennedy’s computer 6 and memory location 7 are part of alignment system 10, not part of the optical device under test 13 (i.e., the optical module) referred to as DUT 13. Claims 13 and 19 specify features of the optical module, not the alignment system. Claim 24 specifies a method that assembles the position memory circuit in the optical module. Accordingly, withdrawal of the rejection of claims 13, 19 and 24 is earnestly solicited.

(2) Furthermore, Musk in view of Kennedy does not disclose, teach or suggest an optical module that includes “means for holding the positioning device in position while the optical module is uncoupled from any alignment system, wherein the means for

holding comprises a position memory circuit to control the positioning device” as specified in claims 13 and 19. Kennedy requires that the optical module 13 be coupled to the alignment system 10 in order for computer 6 and memory location 7 to control the positioning device of the optical module. Accordingly, withdrawal of the rejection of claims 13, 19 and 24 is earnestly solicited.

C. The Office Action rejects claim 16 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2002/0071638 of Musk in view of U.S. Patent Publication No. 2004/0052468 of Pham et al. (hereinafter, Pham). This rejection is respectfully traversed for at least the reasons discussed below.

(1) The Office Action fails to establish a *prima facie* case for the obviousness of claim 16 at least because Musk in view of Pham does not disclose, teach or suggest an optical module that includes means for holding that “comprises an adhesive and a micro heater capable of activating the adhesive” as specified in claim 16.

Musk does not disclose a micro heater at all. Pham does not disclose any type of heater that is a part of the optical module. The optical module of Pham is depicted only in FIGS. 1-3, 5-9 and in FIG. 11 as die package 111, none of which depicts any heater.

In Pham, the process of alignment is depicted in FIG. 10, and a system for implementing the method of alignment is depicted in FIG. 11. See paragraphs 20 and 21 of Pham. It is only FIG. 11 that depicts heater 112, and it is only paragraph 37 that even discusses the heater. However, heater 112 of FIG. 11 is not part of die package 111, but instead is part of system 110 for implementing the alignment method discussed with respect to FIG. 10.

In contrast present claim 16 specifies that the claimed micro heater is a part of the optical module, not part of the separate alignment system. Accordingly, withdrawal of the rejection of claim 16 is respectfully solicited.

(2) The Office Action also fails to establish a *prima facie* case for the obviousness of claim 16 at least because solder is distinct from a heat-activated adhesive.

The Office Action asserts, without evidentiary support, “solder is an adhesive that is extremely well known in the art” (see page 3, lines 7-8 and page 8, lines 3-4). While solder may be known in the art, solder is not an adhesive. Thus, the Office Action’s assertion that solder is an adhesive is respectfully traversed.

A heat-activated adhesive can be activated (i.e., cured) only once. As disclosed in Pham, solder can be melted then solidified, and this melt and solidification process can be repeated many times with solder. The Office Action even asserts that activating solder melts the solder (see page 3, lines 3-5 and page 7, lines 20-21) after which it is allowed to cool. Solder does not irreversibly bind the positioning device in position.

In the present specification, solder and adhesive are discussed as alternative means for holding. See the specification in general, for example the 11th line on page 9, the 5th line on page 10, and the 7th and 8th lines on page 10. For a separate discussion of the solder embodiments, see the 11th through 27th lines on page 10. For a separate discussion of the adhesive embodiments, see the 28th through 32nd lines of page 10 and the 1st and 2nd lines of page 11. As originally filed, the application claimed the solder embodiment in claims 14 and 15 (now cancelled), and separately claimed an adhesive embodiment in claim 16.

The present application discloses solder and adhesive embodiments as distinct. However, the Office Action ignores this application disclosed distinction and asserts, without any support, that solder is an adhesive. This assertion is respectfully traversed, as it is contrary to the disclosure of the application and contrary to the claims prosecution. Accordingly, withdrawal of the rejection of claim 16 is respectfully solicited.

(3) Furthermore, the Office Action fails to establish a *prima facie* case for the obviousness of claim 16 at least because it fails to establish a suggestion or incentive to modify Musk to include a heat-activated adhesive.

The M.P.E.P. instructs that “examiners should apply the test for patentability under 35 U.S.C. §103 set forth in *Graham*.” See M.P.E.P. 2141 through 2143. Even if, *arguendo*, prior art references disclose all of the elements specified in a claimed invention, obviousness also requires that there exist some suggestion to motivate a person of ordinary skill to combine such elements or modify known elements in a way that achieves the claimed invention. Establishment of a suggestion or incentive to modify or combine prior art references requires substantial evidence of such suggestion or incentive.

The Office Action asserts only that “It would have been obvious to one of ordinary skill in the art to include this feature [solder] because the solder is reflowable (see entire document), allowing the device to be realigned multiple times with the device being held in alignment in a robust manner” (see page 3, lines 5-7 and page 8, lines 1-3).

As discussed above, solder is not the feature claimed. Motivation to add non-claimed features (e.g., solder) cannot be regarded as motivation to add a claimed feature (e.g., adhesive). The Office Action fails to establish a *prima facie* case for the obviousness of claim 16 at least because it fails to establish a suggestion or incentive to modify Musk to include a heat-activated adhesive. Accordingly, withdrawal of the rejection of claim 16 is respectfully solicited.

D. The Office Action rejects claims 18 and 22 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2002/0071638 of Musk in view of U.S. Patent Publication No. 2003/0063844 of Caracci et al. (hereinafter, Caracci). If applicable to the present claims, this rejection is respectfully traversed.

The Office Action fails to establish a *prima facie* case for the obviousness of claims 18 and 22 at least because it fails to establish that Musk in view of Caracci discloses an optical module that includes a means for holding “wherein the means for holding comprises an adhesive capable of activation by exposure to RF radiation” as specified in claims 18 and 22. The Office Action admits that Musk does not teach RF activated adhesives.

(1) On page 9, the Office Action asserts that Caracci discloses an RF-activated adhesive. This assertion is respectfully traversed.

An RF-activated adhesive is different than RF welding. In Caracci, paragraph 30 discloses that mounting structure 12 is formed of organic polymers, and paragraph 31 discloses that a ferrule alignment feature 14 is formed in mounting structure 12 and that “the ferrule may be affixed [to ferrule alignment feature 14] by an adhesive, or using other techniques known in the art, such as ultrasonic welding or RF welding.” Caracci discloses adhesives and RF welding as alternatives. Caracci does not disclose, teach or suggest that RF welding uses any form of adhesive. Although Caracci discloses RF welding (different from an RF-activated adhesive), Caracci does not disclose, teach or suggest use of an RF-activated

adhesive as specified in present claims 18 and 22. Accordingly, withdrawal of the rejection of claims 18 and 22 is earnestly solicited.

(2) Although not part of the rejection discussed on page 9 of the Office Action, the Office Action on page 3 asserts, in a section titled Response To Arguments, that page 11 of the present application discloses that UV activated, infrared activated and RF-activated adhesives are "alternatively interchangeable" and that being alternatively interchangeable "indicates that RF-activated adhesives are convention adhesive options well known in the art." These assertions are respectfully traversed.

First, the disclosures in the present application are not prior art to the present application.

Second, disclosing alternatives usable in the claimed invention does not constitute a disclosure that such alternatives are generally alternatives in the art.

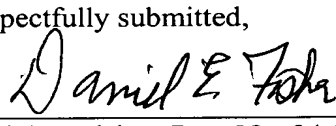
Third, the disclosure of an embodiment using an RF-activated adhesive and another embodiment using a UV-activated adhesive, cannot be relied upon to read UV-activated adhesives into a claim that expressly specifies the RF-activated adhesive.

Accordingly, withdrawal of the rejection of claims 18 and 22 is earnestly solicited.

In view of the present amendments and remarks, favorable reconsideration is courteously requested. If there are any remaining issues that can be expedited by a telephone conference, the Examiner is courteously invited to telephone counsel at the number indicated below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 50-3718.

Respectfully submitted,

 3/23/06

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Attorney Docket No.: 10030542-1

Date: March 23, 2006